

22/02/2005

~~10257240~~

10/643,747

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1626KAS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 SEP 01 New pricing for the Save Answers for SciFinder Wizard within
STN Express with Discover!
NEWS 4 OCT 28 KOREAPAT now available on STN
NEWS 5 NOV 30 PHAR reloaded with additional data
NEWS 6 DEC 01 LISA now available on STN
NEWS 7 DEC 09 12 databases to be removed from STN on December 31, 2004
NEWS 8 DEC 15 MEDLINE update schedule for December 2004
NEWS 9 DEC 17 ELCOM reloaded; updating to resume; current-awareness
alerts (SDIs) affected
NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness
alerts (SDIs) affected
NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness
alerts (SDIs) affected
NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness
alerts (SDIs) affected
NEWS 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and
February 2005
NEWS 17 JAN 26 CA/CAPLUS - Expanded patent coverage to include the Russian
Agency for Patents and Trademarks (ROSPATENT)
NEWS 18 FEB 10 STN Patent Forums to be held in March 2005
NEWS 19 FEB 16 STN User Update to be held in conjunction with the 229th ACS
National Meeting on March 13, 2005

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation

22/02/2005 ~~10257340~~

of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 03:05:04 ON 22 FEB 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 03:05:11 ON 22 FEB 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 20 FEB 2005 HIGHEST RN 834857-08-8

DICTIONARY FILE UPDATES: 20 FEB 2005 HIGHEST RN 834857-08-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

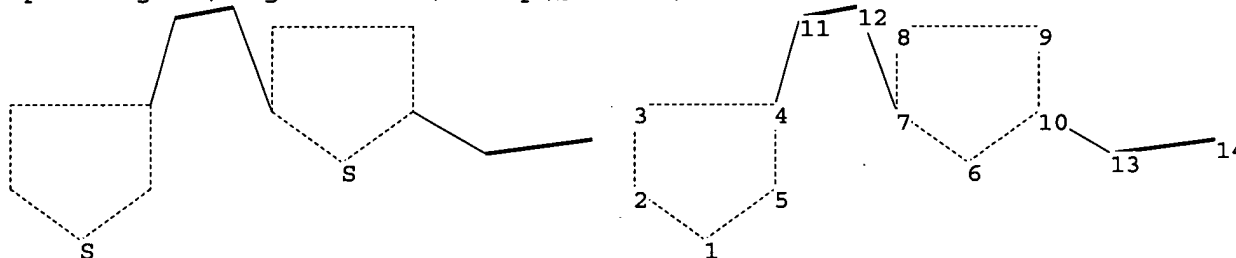
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\102573401.str



chain nodes :

11 12 13 14

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

4-11 7-12 10-13 11-12 13-14

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10

exact bonds :

4-11 7-12 10-13 11-12 13-14

22/02/2005 10:22:40

isolated ring systems :
containing 1 : 6 :

Match level :

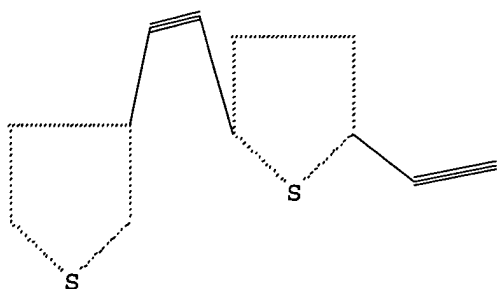
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 03:05:38 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 14 TO ITERATE

100.0% PROCESSED 14 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 56 TO 504
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 03:05:46 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 300 TO ITERATE

100.0% PROCESSED 300 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

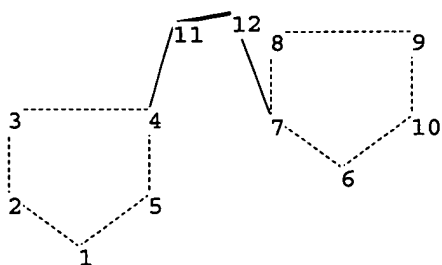
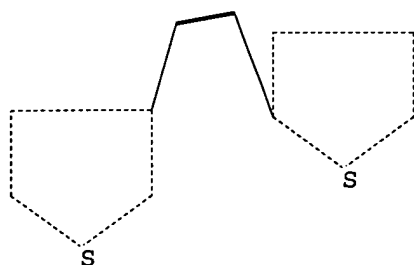
L3 0 SEA SSS FUL L1

=>

Uploading C:\Program Files\Stnexp\Queries\102573402.str

22/02/2005

~~1085/340~~



chain nodes :

11 12

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

4-11 7-12 11-12

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10

exact bonds :

4-11 7-12 11-12

isolated ring systems :

containing 1 : 6 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

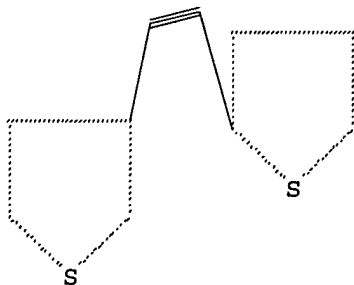
11:CLASS 12:CLASS

L4 STRUCTURE UPLOADED

=> d

L4 HAS NO ANSWERS

L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l4

SAMPLE SEARCH INITIATED 03:07:04 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 26 TO ITERATE

22/02/2005 10257340

100.0% PROCESSED 26 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 215 TO 825
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L4

=> s l5 full
FULL SEARCH INITIATED 03:07:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 432 TO ITERATE

100.0% PROCESSED 432 ITERATIONS
SEARCH TIME: 00.00.01

24 ANSWERS

L6 24 SEA SSS FUL L4

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	323.52	323.73

FILE 'CAPLUS' ENTERED AT 03:07:24 ON 22 FEB 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 Feb 2005 VOL 142 ISS 9
FILE LAST UPDATED: 21 Feb 2005 (20050221/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l6
L7 10 L6
=> d ibib abs hitstr tot

22/02/2005

1025310

L7 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 2004:947945 CAPLUS

DOCUMENT NUMBER: 142:93751

TITLE: Ethynyl π -extended 2,5-diphenyl-1,3,4-oxadiazoles and 2-phenyl 5-(2-thienyl)-1,3,4-oxadiazoles: synthesis, X-ray crystal structures and optical properties

AUTHOR(S): Hughes, Gregory; Kreher, David; Wang, Changsheng; Batsanov, Andrei S.; Bryce, Martin R.

CORPORATE SOURCE: Department of Chemistry, University of Durham, Durham,

SOURCE: DH1 3LE, UK Organic & Biomolecular Chemistry (2004), 2(22), 3363-3367

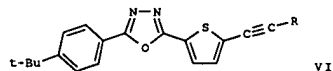
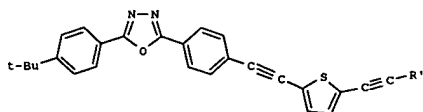
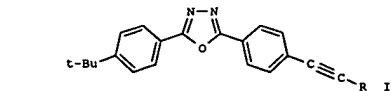
CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB 2-(4-Tert-Butylphenyl)-5-(4-ethynylphenyl)-1,3,4-oxadiazole (I, R = H) reacted with a series of heteroaryl iodides under standard Sonogashira cross-coupling conditions to yield products I [R = 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrazyl (II), 5-bromo-2-pyrimidyl, 2-thienyl (III) and 3-thienyl (IV)] in 40-79% yields. Compound III was lithiated followed by electrophilic iodination using perfluorohexyl iodide to give the

L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 2004:48246 CAPLUS

DOCUMENT NUMBER: 141:190426

TITLE: Exploration of the electronic structure of dendrimer-like acetylene-bridged oligothiophenes by correlating Raman spectroscopy, electrochemistry, and theory

AUTHOR(S): Casado, Juan; Pappenfus, Ted M.; Mann, Kent R.; Hernandez, Victor; Lopez Navarrete, Juan T.

CORPORATE SOURCE: Department of Physical Chemistry, University of Malaga, Malaga, 29071, Spain

SOURCE: Journal of Chemical Physics (2004), 120(24), 11874-11881

CODEN: JCPSA6; ISSN: 0021-9606

PUBLISHER: American Institute of Physics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of radial thiophene-based structures consisting of a central benzene or thiophene ring surrounded by acetylene-bridged terthienyl arms has been investigated by phys. and theor. methods. Fourier transform Raman spectroscopy of the neutral solids shows that the terthiophene arms are weakly coupled across the core (benzene plus acetylene groups) likely due to cross-conjugation or meta-conjugation effects that may prevent

full delocalization. By increasing the number of arms around the central ring, the electronic structure of the mols. seems to be affected only at the core, whereas the outer terthiophene arms remain almost unaltered. Raman spectroelectrochem. and quantum chemical calcs. provide further insight into the charge delocalization of the oxidized species. There is no evidence to suggest that these oxidized forms, obtained upon electrochem. doping of the mols., show charge delocalization across the core.

IT 462092-81-5 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(electronic structure of dendrimer-like acetylene-bridged oligothiophenes)

RN 462092-81-5 CAPLUS

CN 2,2'5',2''-Terthiophene, 5,5''',5''''',5''''''-(2,3,4,5-thiophenetetrayltetra-2,1-ethynediyl)tetrakis[3',4'-dibutyl-5'''-phenyl-(9CI) (CA INDEX NAME)

L7 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

corresponding iodothienyl deriv., which by a two-step sequence gave the terminal ethynylthienyl deriv. V (R' = H). Conversion of V into the terminal ethynylaldehyde deriv. V (R' = CHO) via acetal deriv. proceeded in high yield. Starting from 2-iodo-5-methoxycarbonylthiophene, a five-step sequence afforded 2-(4-tert-butylphenyl)-5-(4-ethynylthienyl)-1,3,4-oxadiazole (VI, R = H) (13% overall yield). Sonogashira cross-coupling reactions of VI with heteroaryl iodides gave 2-phenyl-5-(2-thienyl)-1,3,4-oxadiazoles VI (R = 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-pyrazyl (VII), 5-bromo-2-pyrimidyl, 2-thienyl and 3-thienyl).

Two-fold reaction of V with 2,5-diiodothiophene gave the bis(ethynylthienyl)thiophene deriv. (30% yield). Soln. UV-Vis absorption and photoluminescence spectra establish that replacement of the Ph ring

in the 2,5-diphenyl-1,3,4-oxadiazole series I by a thienyl ring as in VI leads to a red shift in the lowest energy band in both the absorption spectra and emission spectra. The X-ray crystal structures of compds.

II, IV, V and VII-CHCl3 reveal that the mol. structures are approx. planar although there are substantial differences in the conformations.

IT 819863-94-02

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation and optical property of

phenyl(heteroarylethynylthienyl)oxadiaz

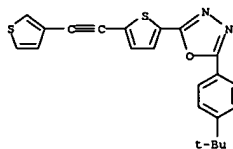
oles via Sonogashira coupling of phenyl(ethynylthienyl)oxadiazoles

with heteroaryl iodides)

RN 819863-94-0 CAPLUS

CN 1,3,4-Oxadiazole,

2-[4-(1,1-dimethylethyl)phenyl]-5-[5-(3-thienylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: THIS

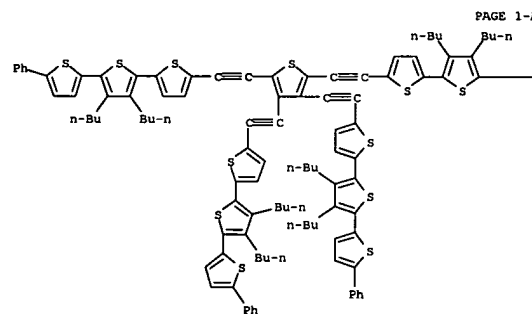
38

THERE ARE 38 CITED REFERENCES AVAILABLE FOR

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



PAGE 1-A

PAGE 1-B



REFERENCE COUNT: THIS

36

THERE ARE 36 CITED REFERENCES AVAILABLE FOR

FORMAT

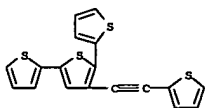
RECORD. ALL CITATIONS AVAILABLE IN THE RE

22/02/2005

10257540

L7 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:72026 CAPLUS
 DOCUMENT NUMBER: 138:25614
 TITLE: Polyterthiophene Appended by Organomolybdenum Sulfide Cluster: Electrochemical Synthesis and
 Electrochemical
 Properties of Poly[Mo₂(μ-C₅H₅)₂(μ-η²:η²-SC(R):C[S(C₄H₅(C₄H₃S-2)-2,5)]₂)]₂s
 Kim, Dong Hyun; Kim, Joo-Hwan; Kim, Tae Ho; Kang, Dong
 Min; Kim, Yong Hwan; Shim, Yoon-Bo; Shin, Sung Chul
 CORPORATE SOURCE: Department of Chemistry, Gyeongsang National University, Jinju, 660-701, S. Korea
 SOURCE: Chemistry of Materials (2003), 15(4), 825-827
 CODEN: CMATEX; ISSN: 0897-4756
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Polythiophene hybrids were synthesized by electrochem. polymerization of monomer clusters of formula [(CpMo)₂(SC(R):CS[C₄H₅(C₄H₃S-2)-2,5)]₂s, where R = H, Ph, Bu, thienyl, tolyl. The monomer clusters were prepared by the reaction of 3'-(alkynyl)-2,2':5',2''-terthiophenes with (CpMo)₂(SC₃H₆S)₂ in CH₂Cl₂ and isolated as reddish brown solids by column chromatog. in 15-46 % yield. The crystal structure of the clusters was elucidated; e.g., the atomic connection of the phenyl-cluster has a syn isomer in terthienyl/terthienyl orientation around Mo. Cyclic voltammograms (CV) of the clusters in CH₂Cl₂ containing 0.1 M tetrabutylammonium phosphate (TBAP) show chemical reversibility for generation of the Mo⁺ and Mo²⁺ species and an irreversible wave at 1.30 - 1.41 V assigned to oxidation of terthienyl moiety, i.e., electrochem. polymerization. Polythiophene clusters were prepared by potential cycling on Pt disk electrodes or ITO coated glass electrodes in CH₂Cl₂ containing 0.1 M TBAP at 0.0 to 1.5 V and scan rate 100 mV s⁻¹. The polythiophene clusters show color switching between brown (neutral) and gray (oxidized) states, a unique electrochromism distinguishable from that of thiophene-based conducting polymers. Such unique electrochromism is attributed to electronic synergistic interactions between Mo sulfide cluster units and the polythiophene π-backbone.
 IT 502962-87-0P, 3'-(2-Thienylethynyl)-2,2':5',2''-terthiophene
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of terthiophene molybdenum sulfide cluster monomers and electrooxidative polymerization producing conducting electrochromic polythiophenes)
 RN 502962-87-0 CAPLUS
 CN 2,2':5',2''-Terthiophene, 3'-(2-thienylethynyl)- (9CI) (CA INDEX NAME)

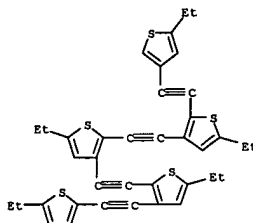
L7 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

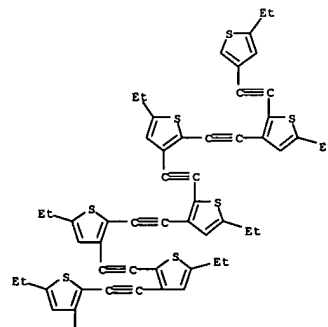
L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:955957 CAPLUS
 DOCUMENT NUMBER: 138:154084
 TITLE: Photoexcitation and Electron Transfer Properties of Rod- and Coil-Type Oligo(thienylene-ethynylene)s
 Fujitsuka, Mamoru; Makinoshima, Takashi; Ito, Osamu; Obara, Yuko; Aso, Yoshio; Otsubo, Tetsuo
 CORPORATE SOURCE: Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai, 980-8577, Japan
 SOURCE: Journal of Physical Chemistry B (2003), 107(3), 739-746
 CODEN: JPCBPK; ISSN: 1520-6106
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Photoexcitation and electron-transfer properties of two series of oligo(thienylene-ethynylene)s, in which thiophene rings were connected with ethynylene groups at 2,5 or 2,3 positions (nTTE or nPTE; n denotes the number of the repeating unit), have been studied. From MO calcs. and steady-state absorption spectra, expanded π-electron systems were expected for rod-type nTTE in the ground states, while limited π-electron systems were expected for coil-type nPTE. On the other hand, because nPTE shows a substantial red shift of the fluorescence band similar to that of nTTE with increasing n value, a conformational change expanding π-conjugation of nPTE was suggested in the excited state. From the picosecond laser flash photolysis, the time scale for the conformational change was evaluated to be ca. 30 ps. The triplet state properties of nTTE and nPTE were estimated by means of the nanosecond laser flash photolysis. Furthermore, electron donor abilities of the present oligomers were investigated by studying the photoinduced electron-transfer processes with fullerenes, C₆₀ and C₇₀. It was revealed that the present oligomers donate an electron to the triplet excited C₆₀ or C₇₀ generating the radical cations and anions of oligomers and fullerene, resp. The electron-transfer rate constants were as small as 0.07-0.0008 of the diffusion-controlled limit, indicating the longer range electron-transfer processes due to larger size of the oligomers and fullerenes. On the other hand, back-electron-transfer processes proceeded at the diffusion-limiting rate.
 IT 383176-57-6 383176-59-8 383176-60-1
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
 (photoexcitation and electron transfer properties of rod- and coil-type oligo(thienylene-ethynylene)s)
 RN 383176-57-6 CAPLUS
 CN Thiophene, 5-ethyl-2-[[[5-ethyl-2-[[[5-ethyl-3-thienyl]ethynyl]-3-thienyl]ethynyl]-3-[[[5-ethyl-3-[[[5-ethyl-2-thienyl]ethynyl]-2-thienyl]ethynyl]-2-thienyl]ethynyl]-2-thienyl]ethynyl]-2-thienyl]ethynyl]- (9CI) (CA INDEX NAME)

L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 383176-59-8 CAPLUS
 CN Thiophene, 5-ethyl-2-[[[5-ethyl-2-[[[5-ethyl-2-[[[5-ethyl-3-thienyl]ethynyl]-3-thienyl]ethynyl]-3-thienyl]ethynyl]-3-thienyl]ethynyl]-3-[[[5-ethyl-3-[[[5-ethyl-2-thienyl]ethynyl]-2-thienyl]ethynyl]-2-thienyl]ethynyl]-2-thienyl]ethynyl]- (9CI) (CA INDEX NAME)

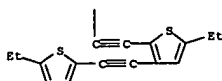
PAGE 1-A



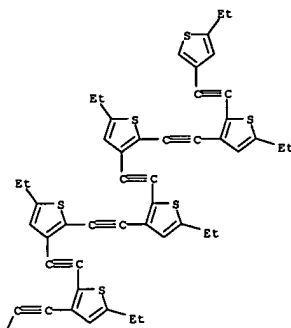
~~410257-450~~

L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A

[illegible]

PAGE 1-A



L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:595917 CAPLUS

DOCUMENT NUMBER: 137:279554

TITLE: Synthesis and properties of coil-shaped
2,3-thienylene-ethynylene oligomers

AUTHOR(S): Aso, Yoshio; Obara, Yuko; Okai, Takashi; Nishiguchi, Shoji; Otsubo, Tetsuo

CORPORATE SOURCE: Faculty of Engineering, Hiroshima University,

SOURCE: Higashi-Hiroshima, 739-8527, Japan
Molecular Crystals and Liquid Crystals Science and
Technology, Section A: Molecular Crystals and Liquid
Crystals (2002), 376, 153-158

Crystals (2002), 376,
CODEN: MCLCE9; ISSN:

PUBLISHER:

DOCUMENT TYPE: Journal

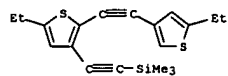
AB A series of 2,3-thienylene-ethynylene oligomers have been synthesized by repeated application of the Pd-catalyzed coupling reaction of terminal alkyne and thienyl iodides as the key building steps. The anal. GC mol. wt. measurements are in good agreement with the calculated values, suggesting a coil shape for the conformation of the oligomers in solution. Their electronic absorption and emission spectral features are discussed.

IT 467251-58-7P 467251-59-8P 467251-60-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(Pd-catalyzed coupling synthesis and solution coil chain conformation)

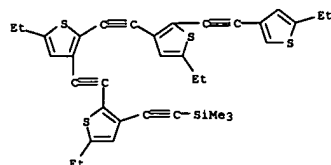
of 2,3-thienylene-ethynylene oligomers)

2,3-thienylene-ethynylene Oligomers)
RN 467251-58-7 CAPLUS
CN Silane, [[5-ethyl-2-[(5-ethyl-3-thienyl)ethynyl]-3-
thienyl]ethynyl]trimethyl- (9CI) (CA INDEX NAME)



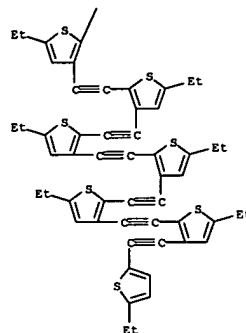
RN 467251-59-8 CAPLUS

[[5-ethyl-2-[[5-ethyl-2-[[5-ethyl-2-[[5-ethyl-3-thienyl]ethynyl]-3-thienyl]ethynyl]-3-thienyl]ethynyl]-3-thienyl]ethynyl]trimethyl- (9CI)
(CA INDEX NAME)



L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

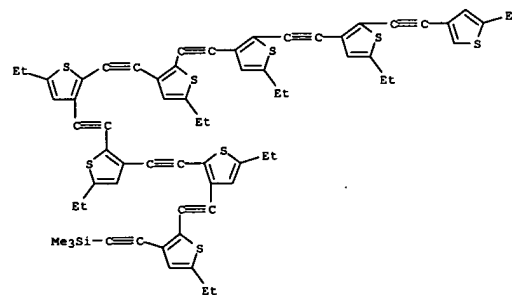
PAGE 2-A



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 467251-60-1 CAPLUS

[illegible]

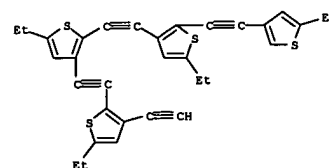
IT 383176-54-3P 383176-55-4P 467251-54-3P

467251-55-4P 467251-57-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(coupling component; Pd-catalyzed coupling synthesis and solution coil chain conformation of 2,3-thienylene-ethynylene oligomers)

RN 383176-54-3 CAPLUS

5-ethyl-3-[(5-ethyl-3-[(5-ethyl-3-ethynyl-2-thienyl)ethynyl]-2-thienyl)ethynyl]-2-[(5-ethyl-3-thienyl)ethynyl]- (9CI) (CA INDEX NAME)



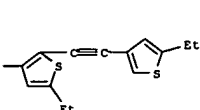
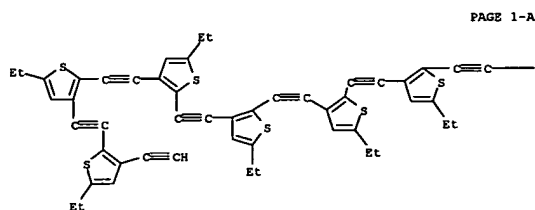
RN 383176-55-4 CAPLUS

CN Thiophene, 5-ethyl-3-{{5-ethyl-3-{{5-ethyl-3-[[5-ethyl-3-[(5-ethyl-3-

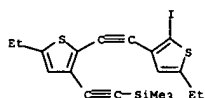
22/02/2005

~~1046549~~

L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
ethynyl-2-thienyl]ethynyl]-2-thienyl]ethynyl]-2-thienyl]ethynyl]-2-
thienyl]ethynyl]-2-[[5-ethyl-2-[[5-ethyl-2-[[5-ethyl-3-thienyl]ethynyl]-3-
thienyl]ethynyl]-3-thienyl]ethynyl]- (9CI) (CA INDEX NAME)

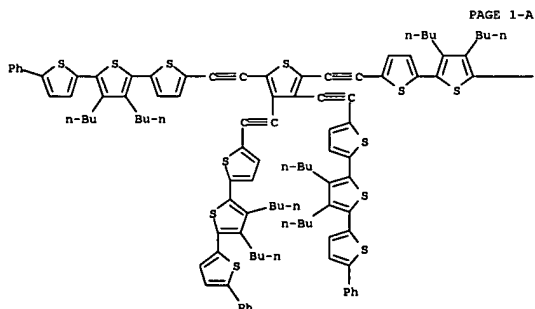


RN 467251-54-3 CAPLUS
CN Silane, [[5-ethyl-2-[[5-ethyl-2-[[5-ethyl-2-iodo-3-thienyl]ethynyl]-3-
thienyl]ethynyl]trimethyl- (9CI) (CA INDEX NAME)

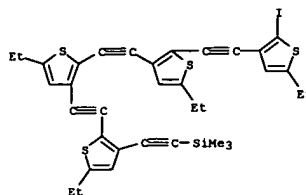


RN 467251-55-4 CAPLUS
CN Silane, [[5-ethyl-2-[[5-ethyl-2-[[5-ethyl-2-iodo-3-
thienyl]ethynyl]-3-thienyl]ethynyl]-3-thienyl]ethynyl]-3-
thienyl]ethynyl]trimethyl- (9CI) (CA INDEX NAME)

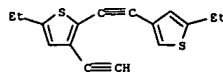
L7 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:572214 CAPLUS
DOCUMENT NUMBER: 137:263399
TITLE: Synthesis and Characterization of Radial
Oligothiophenes: A New Class of Thiophene-Based
Conjugated Homologues
AUTHOR(S): Pappenfus, Ted M.; Mann, Kent R.
CORPORATE SOURCE: Department of Chemistry, University of Minnesota,
Minneapolis, MN, 55455, USA
SOURCE: Organic Letters (2002), 4(18), 3043-3046
CODEN: ORLEFF; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of thiophene-based homologues with an aromatic core surrounded
by
terthiophene "arms" with acetylene linkages has been synthesized by using
Sonogashira coupling methods. The homologues were investigated
spectroscopically in solution and in the solid state. They display
extended
 π -conjugation through the aromatic core that affects the strong emission
and redox properties.
IT 462092-81-5P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and electronic spectra and cyclic voltammetry
characterization
of)
RN 462092-81-5 CAPLUS
CN 2,2':5',2''-Terthiophene, 5,5''',5''''',5''''''-(2,3,4,5-
thiophenetetrayltetra-2,1-ethynediyl)tetrakis[3',4'-dibutyl-5''-phenyl-
(9CI) (CA INDEX NAME)



L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 467251-57-6 CAPLUS
CN Thiophene, 5-ethyl-2-[[5-ethyl-3-thienyl]ethynyl]-3-ethynyl- (9CI) (CA
INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR
THIS
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L7 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
PAGE 1-B



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR
THIS
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

22/02/2005

~~136:146541~~

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:12397 CAPLUS

DOCUMENT NUMBER: 136:146541

TITLE: Preparation of 1,2,4-triazole derivatives as insecticides or acaricides and processes
 INVENTOR(S): Hegde, Vidyadhar Babu; Bis, Scott Jerome; Heo, Emilie Chassat; Hamilton, Christopher Thomas; Johnson, Peter Lee; Karr, Laura Lee; Martin, Timothy Patrick; Neese, Paul Allen; Orr, Nailah; Tisdell, Francis Eugene;

Yap,

PATENT ASSIGNEE(S): Maurice Chee Hoong; Zhu, Yuanming

SOURCE: Dow Agrosciences LLC, USA

U.S. Pat. Appl. Publ., 29 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

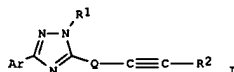
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002019370	A1	20020214	US 2001-834845	20010413
US 6417187	B2	20020709		

PRIORITY APPLN. INFO.: US 2000-197179P P 20000414

OTHER SOURCE(S): MARPAT 136:146541

GI



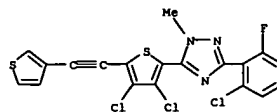
AB 3-(Substituted aryl)-5-(substituted aryl(alkynylaryl))-[1,2,4]triazole compds. I (Ar = alkyl, (un)substituted Ph or pyridyl; R1 = alkyl, cycloalkyl or substituted Ph; Q = (un)substituted Ph, thienyl or pyridyl; R2 = H, alkyl, alkenyl, etc.) are useful as insecticides and acaricides. New synthetic procedures and intermediates for preparing the compds., pesticide compds. containing the compds., and methods of controlling insects and mites using the compds. are also provided.

IT 395081-96-6P
 RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation as insecticide and acaricide)

RN 395081-96-6 CAPLUS

CN 1H-1,2,4-Triazole, 3-(2-chloro-6-fluorophenyl)-5-[3,4-dichloro-5-(3-thienylethynyl)-2-thienyl]-1-methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:878954 CAPLUS

DOCUMENT NUMBER: 136:200259

TITLE: Star-shaped polyferrocenes based on thiophene and triphenylamine: synthesis, spectroscopy and electrochemistry

AUTHOR(S): Thomas, K. R. Justin; Lin, Jiann T.
 CORPORATE SOURCE: Institute of Chemistry, Academia Sinica, Nankang, Taipei, 115, Taiwan

SOURCE: Journal of Organometallic Chemistry (2001), 637-639, 139-144
 CODEN: JORCAI; ISSN: 0022-328X

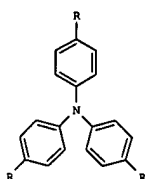
Elsevier Science S.A.

Journal

English

OTHER SOURCE(S): CASREACT 136:200259

GI



I



II

AB Star-shaped tri- (I, R = C.tpbond.CXFC, Fc = ferrocenyl, X = spacer = none, CH:CHC6H4-4-, CH:CH-2-thien-5-yl) and tetra-ferrocenes (II)

anchored on triphenylamine or thiophene cores were obtained by cross-coupling reactions of Fe-X-C.tpbond.CH with tris(p-iodophenyl)amine or tetrabromothiophene, resp., catalyzed by Pd(PPh3)2Cl2/CuI/PPh3/Et2NH in moderate to good yields. These polymetallic systems were characterized

by NMR, UV-visible and mass spectral methods, elemental analyses and by electrochem. studies. As observed earlier for tris(ferrocenyl)benzenes, these complexes also lack electronic communication, however, a thorough anal. indicates an existence of electronic charge delocalization between the ferrocenyl moiety and the central core.

IT 401837-77-2P
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

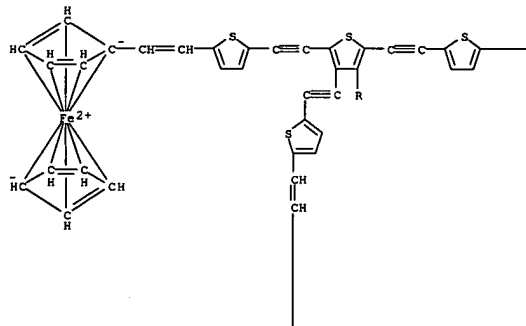
(preparation, UV-visible and electrochem. data of)

RN 401837-77-2 CAPLUS

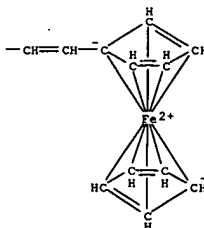
CN Ferrocene, 1,1'',1''',1''''-[2,3,4,5-thiophenetetrakis[2,1-ethynediyl]-5,2-thiophenediyl-(1E)-2,1-ethenediyl]]tetrakis- (9CI) (CA INDEX NAME)

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

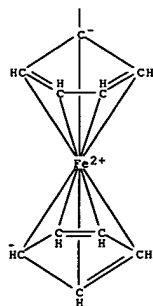


22/02/2005

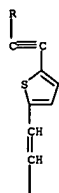
~~10253340~~

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A



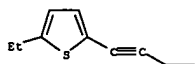
PAGE 3-A



L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

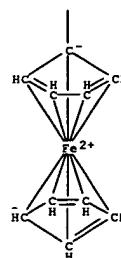
ACCESSION NUMBER: 2001:674529 CAPLUS
 DOCUMENT NUMBER: 136:53649
 TITLE: Synthesis and photophysical properties of [60]fullerene-oligo(thienylene-ethynylene) dyads
 AUTHOR(S): Obara, Y.; Takimiya, K.; Aso, Y.; Otsubo, T.
 CORPORATE SOURCE: Graduate School of Engineering, Department of Applied Chemistry, Hiroshima University, Kagamiyama, Higashi-Hiroshima, 739-8527, Japan
 SOURCE: Tetrahedron Letters (2001), 42(39), 6877-6881
 CODEN: TETLEA; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 136:53649
 AB Two series of [60]fullerene-linked oligo(2,3- and 2,5-thienylene-ethynylene)s have been synthesized to elucidate their photophys. characteristics. Their fluorescence spectra in toluene reveals distinct photoinduced intramol. interactions between the oligomers and C60, which occur in a through-space fashion for the 2,3-thienylene-ethynylene system and in a through-bond fashion for the 2,5-thienylene-ethynylene system.
 IT 383176-43-0P 383176-44-1P 383176-46-3P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and photophys. properties of [60]fullerene-oligo(thienylene-ethynylene) dyads)
 RN 383176-43-0 CAPLUS
 CN 2'H-[5,6]Fullereno-C60-Ih-[1,9-c]pyrrole, 2'-[5-ethyl-3-[[5-ethyl-3-[[5-ethyl-3-[[5-ethyl-3-[[5-ethyl-2-thienyl]ethynyl]-2-thienyl]ethyl]-2-thienyl]ethynyl]-2-thienyl]-1',5'-dihydro-1'-methyl-(9CI) (CA INDEX NAME)

PAGE 1-A



L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

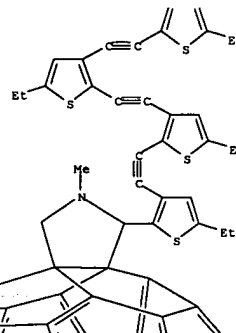
PAGE 4-A



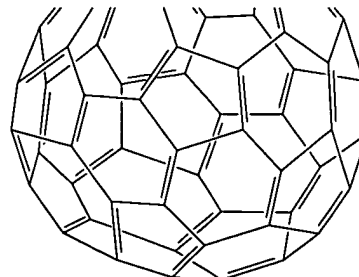
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A



PAGE 3-A



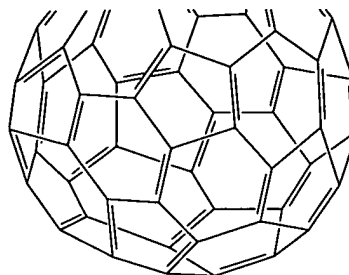
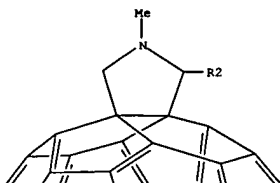
RN 383176-44-1 CAPLUS
 CN 2'H-[5,6]Fullereno-C60-Ih-[1,9-c]pyrrole, 2'-[5-ethyl-3-[[5-ethyl-3-[[5-ethyl-3-[[5-ethyl-3-[[5-ethyl-2-thienyl]ethynyl]-2-thienyl]ethyl]-2-thienyl]ethynyl]-2-thienyl]-1',5'-dihydro-1'-methyl-(9CI) (CA INDEX NAME)

~~10257340~~

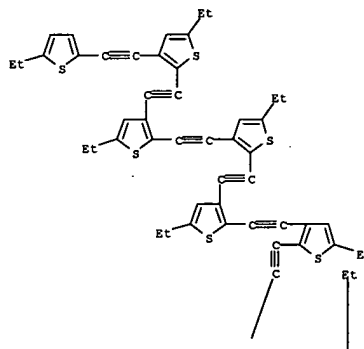
L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A

PAGE 1-A

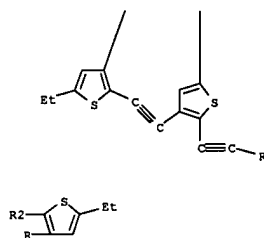


PAGE 3-A



L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

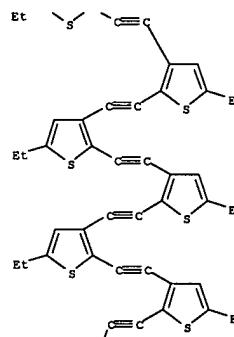
L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



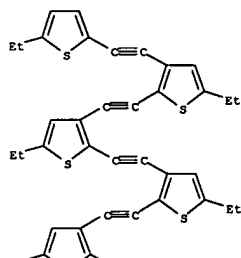
PAGE 4-A

[illegible]

PAGE 2-A



PAGE 1-A

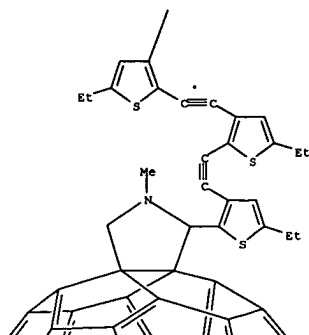


~~102-17340~~

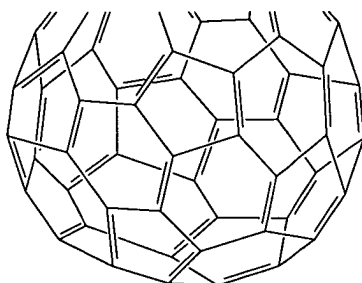
L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

PAGE 3-A



PAGE 4-A

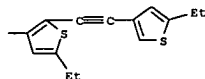


IT 383176-54-3 383176-55-4 383176-56-5

L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

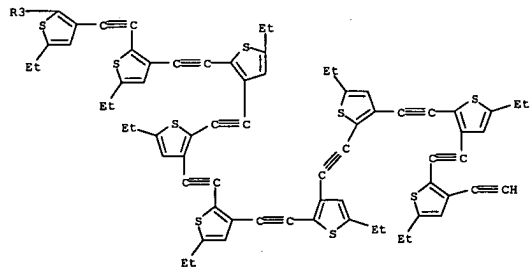
PAGE 1-B



RN 383176-56-5 CAPLUS

[illegible]

PAGE 1-A



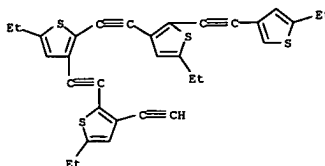
L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and photophys. properties of [60]fullerene-oligo(thienylene-ethynylene) dyads)

RN 383176-54-3 CAPLUS

RN	383176-34-
CN	Thiophene,

5-ethyl-3-[[5-ethyl-3-[(5-ethyl-3-ethynyl-2-thienyl)ethynyl]-2-thienyl]ethynyl]-2-[(5-ethyl-3-thienyl)ethynyl]-9CI (CA INDEX NAME)

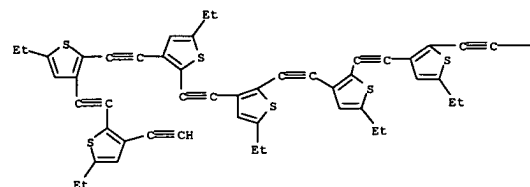


RN 383176-55-4 CAPLUS

CC1=CC=C(C#CC2=CC=CC=C2C#CC3=CC=CC=C3C#CC4=CC=CC=C4C#CC5=CC=CC=C5)C=C1

thienyl]ethynyl]-2-[[5-ethyl-2-[[5-ethyl-2-((5-ethyl-3-thienyl)ethynyl)-3-thienyl]ethynyl]-3-thienyl]ethynyl]- (9CI) (CA INDEX NAME)

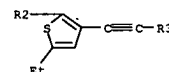
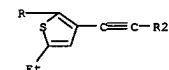
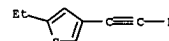
PAGE 1-A



L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

PAGE 2-A



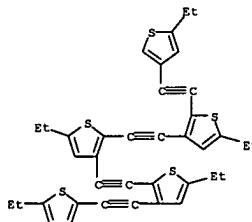
IT 383176-57-6P 383176-59-8P 383176-60-1P

383176-61-2P 383176-62-3P 383176-63-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)	(preparation and photophys. properties of [60]fullerene-oligo(thienylene- ethynylene) dyads)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

RN 383176-57-6 CAPLUS

Thiophene, 5-ethyl-2-[[5-ethyl-2-[(5-ethyl-3-thienyl)ethynyl]-3-thienyl]ethynyl]-3-[[5-ethyl-3-[(5-ethyl-2-thienyl)ethynyl]-2-thienyl]ethynyl]- (9CI) (CA INDEX NAME)



RN 383176-59-8 CAPLUS

Thiophene, 5-ethyl-2-[[5-ethyl-2-[[5-ethyl-2-[[5-ethyl-2-[[5-ethyl-3-

thienyl}ethynyl]-3-thienyl}ethynyl]-3-thienyl}ethynyl]-3-thienyl}ethynyl]-3-[[5-ethyl-3-[[5-ethyl-3-[[5-ethyl-3-[[5-ethyl-2-thienyl}ethynyl]-2-

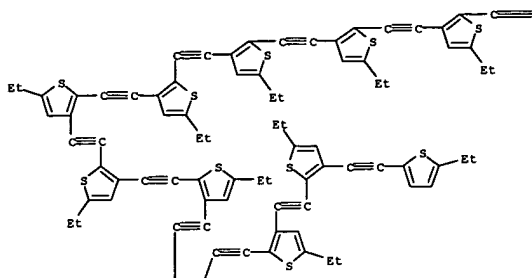
22/02/2005

~~10257340~~

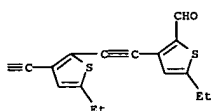
L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



PAGE 2-A



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR
THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L7 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:644532 CAPLUS

DOCUMENT NUMBER: 127:331111

TITLE: Synthesis and electronic structure of
1,2-heteroarylethynes: potential monomers for low
bandgap conductive polymers

AUTHOR(S): Ng, S. C.; Novak, I.; Wang, L.; Huang, H. H.; Huang,
W.

CORPORATE SOURCE: Department of Chemistry, National University of
Singapore, Singapore, 119260, Singapore

SOURCE: Tetrahedron (1997), 53(39), 13339-13350

CODEN: TETRAE; ISSN: 0040-4020

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

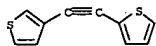
LANGUAGE: English

AB A series of 1,2-heteroarylethynes which are potential monomers to low
bandgap materials were synthesized and their He I photoelectron spectra
measured and assigned with the aid of empirical arguments and
semi-empirical MO calcs. The electronic structure anal. reveals that
C.tpbond.C bond is an efficient relay of π -electrons and that it
supports inter-ring conjugation. The efficiency depends on the nature of
ring heteroatom, but not on its position within the ring. The importance
of C.tpbond.C bond relay is discussed in the broader context of
conjugated polymer applications.

IT 197957-63-4P, 2,3'-Bisthiénylethyne
RI: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and photoelectron spectra of 1,2-heteroarylethynes)

RN 197957-63-4 CAPLUS

CN Thiophene, 2-(3-thienylethynyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR
THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

22/02/2005

~~18287340~~

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

49.85

373.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-7.30

-7.30

STN INTERNATIONAL LOGOFF AT 03:08:16 ON 22 FEB 2005